

VVV VVV MMM MMM SSSSSSSSSSSSS LLL ||||| BBBBBBBBBBBB
VVV VVV MMM MMM SSSSSSSSSSSSS LLL ||||| BBBBBBBBBBBB
VVV VVV MMM MMM SSSSSSSSSSSSS LLL ||||| BBBBBBBBBBBB
VVV VVV MMMMMM MMMMMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV MMMMMM MMMMMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV MMMMMM MMMMMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV MMM MMM MMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV MMM MMM MMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV MMM MMM MMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV MMM MMM MMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV MMM MMM SSSSSSSSS LLL ||||| BBBBBBBBBBBB
VVV VVV VVV MMM MMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV VVV MMM MMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV VVV MMM MMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV VVV MMM MMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV VVV MMM MMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV VVV MMM MMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV VVV MMM MMM SSS LLL ||||| BBBBBBBBBBBB
VVV VVV VVV MMM SSSSSSSSSSS LLLLL ||||| BBBBBBBBBBBB
VVV VVV VVV MMM SSSSSSSSSSS LLLLL ||||| BBBBBBBBBBBB
VVV VVV VVV MMM SSSSSSSSSSS LLLLL ||||| BBBBBBBBBBBB

FILEID**MATCHNAME

11

MM MM AAAAAA TTTTTTTT CCCCCCCC HH HH NN NN AAAAAA MM MM EEEEEEEE
MM MM AAAAAA TTTTTTTT CCCCCCCC HH HH NN NN AAAAAA MM MM EEEEEEEE
MM MM AA AA TT CC HH HH NN NN AA AA MMMM MMMM EE
MM MM AA AA TT CC HH HH NN NN AA AA MMMM MMMM EE
MM MM AA AA TT CC HH HH NNNN NN AA AA MM MM MM EE
MM MM AA AA TT CC HH HH NNNN NN AA AA MM MM MM EE
MM MM AA AA TT CC HHHHHHHHHH NN NN AA AA MM MM MM EEEEEEEE
MM MM AA AA TT CC HHHHHHHHHH NN NN AA AA MM MM MM EEEEEEEE
MM MM AAAAAAAA TT CC HH HH NN NN NNNN AAAAAAAA MM MM EE
MM MM AAAAAAAA TT CC HH HH NN NN NNNN AAAAAAAA MM MM EE
MM MM AA AA TT CC HH HH NN NN AA AA MM MM MM EE
MM MM AA AA TT CC HH HH NN NN AA AA MM MM MM EE
MM MM AA AA TT CCCCCCCC HH HH NN NN AA AA MM MM EEEEEEEE
MM MM AA AA TT CCCCCCCC HH HH NN NN AA AA MM MM EEEEEEEE

MATCHNAME
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Match General Wild Card Specification ^{N 9} 16-SEP-1984 02:18:58 VAX/VMS Macro V04-00

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(2) 56 FMG\$MATCH_NAME, general wild card matching

0000 1 .TITLE MATCHNAME
0000 2 .IDENT 'V04-000'
0000 3
0000 4
0000 5 *****
0000 6 *
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0000 24 *
0000 25 *
0000 26 *****
0000 27
0000 28 ++
0000 29
0000 30 FACILITY: Files-11 Structure Level 2
0000 31
0000 32 ABSTRACT:
0000 33
0000 34 This routine performs the general embedded wild card matching
0000 35 algorithm.
0000 36
0000 37 ENVIRONMENT:
0000 38
0000 39 VAX/VMS Operating System
0000 40
0000 41 --
0000 42
0000 43
0000 44 AUTHOR: Andrew C. Goldstein, CREATION DATE: 10-Aug-1979 11:36
0000 45
0000 46 MODIFIED BY:
0000 47
0000 48 V03-001 ACG0378 Andrew C. Goldstein, 6-Dec-1983 16:10
0000 49 Incorporate into system build library
0000 50
0000 51 V02-001 MLJ0031 Martin L. Jack, 4-Aug-1981 6:32
0000 52 Reorganize for simplicity and speed.
0000 53
0000 54 **

0000 56 .SBTTL FMG\$MATCH_NAME, general wild card matching
0000 57
0000 58 ++
0000 59
0000 60 Functional Description:
0000 61 This routine performs the general embedded wild card matching
0000 62 algorithm.
0000 63
0000 64 Calling Sequence:
0000 65 JSB
0000 66
0000 67 Input Parameters:
0000 68 R2 = Length of candidate string.
0000 69 R3 = Address of candidate string.
0000 70 R4 = Length of pattern string.
0000 71 R5 = Address of pattern string.
0000 72
0000 73 Implicit Inputs:
0000 74 none
0000 75
0000 76 Output Parameters:
0000 77 none
0000 78
0000 79 Implicit Outputs:
0000 80 none
0000 81
0000 82 Routines Called:
0000 83 none
0000 84
0000 85 Routine Value:
0000 86 True if the strings match.
0000 87
0000 88 Signals:
0000 89 none
0000 90
0000 91 Side Effects:
0000 92 R1-R5 destroyed.
0000 93
0000 94 --
0000 95
00000000 96 .PSELECT _LIB\$CODE,NOWRT,EXE,PIC,SHR
0000 97
0000 98 FMG\$MATCH_NAME::
03C0 8F BB 0000 99 PUSHR #^M<R6,R7,R8,R9> ; Save registers
50 D4 0004 100 CLRL R0 ; Assume failure
56 D4 0006 101 CLRL R6 ; Clear saved candidate count
0008 102
0008 103 : Main scanning loop.
0008 104
54 D7 0008 105 105: DECL R4 ; Pattern exhausted?
24 19 000A 106 BLSS 30\$; Branch if yes
51 85 9A 000C 107 MOVZBL (R5)+,R1 ; Get next character in pattern
2A 51 91 000F 108 CMPB R1, #^A'*' ; Pattern specifies wild string?
28 13 0012 109 BEQL 60\$; Branch if yes
52 D7 0014 110 DECL R2 ; Candidate exhausted?
51 19 0016 111 BLSS 50\$; Branch if yes
83 51 91 0018 112 CMPB R1,(R3)+ ; Compare pattern to candidate

25 EB 13 001B 113 BEQL 10\$; Branch if pattern equals candidate
 51 91 001D 114 CMPB R1 "#A'%" ; Pattern specifies wild character?
 E6 13 0020 115 BEQL 10\$; Branch if yes
 0022 116 ;
 0022 117 ; We have detected a mismatch, or we are out of pattern while there is
 0022 118 ; candidate left. Back up to the last '*', advance a candidate character,
 0022 119 ; and try again.
 0022 120 ;
 56 D7 0022 121 20\$: DECL R6 ; Count a saved candidate character
 11 19 0024 122 BLSS 50\$; Branch if no saved candidate
 57 D6 0026 123 INCL R7 ; Set to try next character
 56 7D 0028 124 MOVQ R6,R2 ; Restore descriptors to backup point
 58 7D 002B 125 MOVQ R8,R4 ;
 D8 11 002E 126 BRB 10\$; Continue testing
 0030 127 ;
 0030 128 ; Here when pattern is exhausted.
 0030 129 ;
 52 D5 0030 130 30\$: TSTL R2 ; Candidate exhausted?
 EE 12 0032 131 BNEQ 20\$; Branch if no
 0034 132 ;
 0034 133 ; Here to return.
 0034 134 ;
 50 01 D0 0034 135 40\$: MOVL #1,R0 ; Set success return
 03C0 8F BA 0037 136 50\$: POPR "#M<R6,R7,R8,R9>" ; Restore registers
 05 003B 137 RSB ; Return
 003C 138 ;
 003C 139 ; We have detected a '*' in the pattern. Save the pointers for backtracking.
 003C 140 ;
 54 D5 003C 141 60\$: TSTL R4 ; Pattern null after '*'?
 F4 13 003E 142 BEQL 40\$; Branch if yes
 56 52 7D 0040 143 MOVQ R2,R6 ; Save descriptors of both strings
 58 54 7D 0043 144 MOVQ R4,R8 ;
 C0 11 0046 145 BRB 10\$; Continue testing
 0048 146 ;
 0048 147 .END

MATCHNAME
Symbol table

Match General Wild Card Specification

E 10

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5-SEP-1984 04:41:15 [VMSLIB.SRC]MATCHNAME.MAR;1 Page 4
(2)

FMG\$MATCH_NAME 00000000 RG 01

! Psect synopsis !

PSECT name

Allocation

PSECT No.

Attributes

. ABS
LIB\$CODE

00000000	(0.)	00 (0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE
00000048	(72.)	01 (1.)	PIC	USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	BYTE

! Performance indicators !

Phase

Page faults

CPU Time

Elapsed Time

Initialization	36	00:00:00.08	00:00:00.61
Command processing	130	00:00:00.46	00:00:02.38
Pass 1	67	00:00:00.43	00:00:01.29
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	40	00:00:00.31	00:00:00.63
Symbol table output	2	00:00:00.01	00:00:00.01
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	279	00:00:01.32	00:00:04.95

The working set limit was 900 pages.

1789 bytes (4 pages) of virtual memory were used to buffer the intermediate code.

There were 10 pages of symbol table space allocated to hold 1 non-local and 6 local symbols.

147 source lines were read in Pass 1, producing 8 object records in Pass 2.

0 pages of virtual memory were used to define 0 macros.

! Macro library statistics !

Macro library name

\$_255\$DUA28:[SYSLIB]STARLET.MLB:2

Macros defined

0

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/DISA=TRACE/LIS=LISS:MATCHNAME/OBJ=OBJ\$:MATCHNAME MSRC\$:MATCHNAME/UPDATE=(ENH\$:MATCHNAME)

0436 AH-BT13A-SE
VAX/VMS V4.0

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